

ger I would sometimes bring up five or six at a haul; and if the fishermen happened to be making a draw with the great seine, a half barrel of them would sometimes be drawn out at once,—many of them great beautiful adult shells nearly as large as a common dinner plate, the epidermis all intact, the stillness of the water and freedom from acid causing but little erosion. The younger shells in their beautiful iridescence, seem to have caught the tints reflected from the green woods, the blue sky and sparkling stars.

The other Anodonta, the corpulenta was not so plentiful in the deeper water that the suborbiculata seemed to prefer, but nearer the shores in shallow water, more or less shaded by the broad leaves of the water lily, many of them could be found. The umbones of this mussel, as found in this lake, more nearly approach perfection than in any other species.

Associated with this mollusk, among the water lilies, were great numbers of *Vivipara contectoides* Binney and *intertexta* Say and also more or less of the *Physa heterostropha* Say.

In collecting and handling these fragile shells much care must be taken as they break as easily as egg shells. When removed from the water I would pile them up in one end of the boat, and cover them up from the sun with a wet blanket. When transferred to my buggy (for I had to drive twenty miles to Bernadotte) I would first line the bottom of the bed with wet grass, on which I arranged the mussels and then again covered them up well with the wet blankets. On reaching home they were at once transferred to a large tub containing water. They must be cleaned without the use of hot water and immediately given a good bath of glycerine, and then kept in a cool place.

DESCRIPTION OF NEW SPECIES OF ANCTUS AND OLIVA.¹

BY JOHN FORD, PHILADELPHIA.

Anctus Pilsbryi Ford. Fig. 1.

See THE NAUTILUS iv, p. 81, 1890; Proc. Acad. N. S. Phila. 1891, p. 81.

Shell rimately umbilicated, the axis imperforate; ovate-conical, spire acute, apex black; whorls 7, slightly convex, the last some-

¹ Reprinted by permission, from Proc. Acad. Nat. Sci. Phila. 1891, pp. 97, 98.



Fig. 1.

what contracted near the base. Aperture extremely narrow, oblong; lip flatly reflected, the central half of its length provided with a flange extending towards the inner or columellar lip, from which proceeds a corresponding convexity, thus giving to the aperture a form much like the traditional key-hole. Color grayish-white, painted longitudinally with brownish and black lines.

Length of shell 23, diameter $9\frac{1}{2}$ mill. Width between flanges 1, width of flange on outer lip 2 mill. Color of lip white; aperture slightly shaded within. Habitat, Brazil.

Anetus angiosoma Wagner (*capueira* Spix), Fig. 2, and *A. Pilsbryi* are the only living species of the genus known, and both are in color pattern and general form very much alike. In the former species, however, the apex is not black and shining as in the latter nor are the apertures at all alike save in general outline. Indeed, that of *A. Pilsbryi* is absolutely distinct from any other known to the writer. This alone would justify its specific separation.



Fig. 2.

The figures were drawn from photographs of the shells and may therefore be accepted as correct.

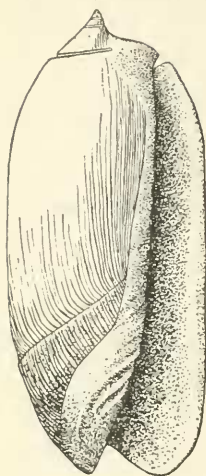
The species has been named in honor of my friend Mr. Henry A. Pilsbry, Conservator of the Conchological department of the Academy and present Editor of the "Manual of Conchology."

Oliva cryptospira Ford. Figs. 3, 4.

Shell cylindrical, slightly enlarged near either end, producing an obese appearance. Salmon-colored, with a few dashes of white accompanied by faint zigzag brownish lines showing through the enamel, the latter being somewhat thickened and more orange in color on the basal fasciole. Spire short, *with sutures entirely concealed by a heavy callus*. Edge of lip and interior of aperture white. Length of type specimen $2\frac{1}{4}$ inches. Greatest diameter 1 inch. Habitat, Moluccas.

This shell is probably well known to veteran collectors, since it has been posing for many years as a variety of *O. irisans* Lamarek, from which species, however, it is in fact distinct.

No figure was given with Lamarck's description of *O. irisans*, but a figure probably intended for the same shell appears in Reeve's "Conchologia Iconica," Vol. 6, Pl. 6, fig. 8a, where it is classed with typical *O. irisans* Lam. That this figure does not agree with Lamarck's description in any essential features is quite apparent.



Figs. 3.

It seems, however, to have been accepted by my late friend, Mr. Tryon, as well as by Reeve, for a form of *O. irisans*, since it was copied for the "Manual" without remark; although several specimens exhibiting characters similar to those shown in the figure—but which belong to *O. cryptospira* only—were at the time in the Academy's collection. Whether these specimens were accidentally overlooked, or the distinctions noted deemed too trifling for special designation, is a question that cannot now be answered.



Fig. 4.

In consequence of this uncertainty, the responsibility of correcting the error of classing this form with *O. irisans*, (if error it be), is accepted rather reluctantly although in the firm belief that the change will benefit the student, as well as, in some slight degree, the cause of Science, also.

WESTERN PENNSYLVANIA SHELLS.

BY E. H. HARN, BLAIRSVILLE, PA.

The following is a list of species which I have collected in Western Pennsylvania. It may be of interest for the sake of locality :

Selenites concavus Say.	Pupa armifera Say.
Zonites fuliginosus Griff.	Pupa contracta Say.
Zonites laevigatus Pfr.	Ferussacia subcylindrica Linn.
Zonites ligerus Say.	Succinea obliqua Say.
Zonites intertextus Binn.	Succinea avara Say.
Zonites inornatus Say.	Succinea Totteniana Lea.
Zonites nitidus Müll.	Campeloma rufa Hald.
Zonites arboreus Say.	Planorbis bicarinata Say.